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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/505,217	04/21/2005	Jong-Sook Kim	2316-044849	2153

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EXAMINER

NICHOLSON III, LESLIE AUGUST

ART UNIT	PAPER NUMBER
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3651

DATE MAILED: 04/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/505,217	<b>Applicant(s)</b> KIM, JONG-SOOK	
	<b>Examiner</b> Leslie A. Nicholson III	<b>Art Unit</b> 3651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 10-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/24/05</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 10,14,18 and 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 recites "...its bottom...". What bottom is this referring to? The escalator or the guard device?

Claim 14 recites "...on a front face thereof to face forward". What is forward and backward in this device?

Claim 18 and 20 recite "... a length corresponding to a distance...". How does the length correspond? Is it equal, approximately equal, or simply have a distance between the front end of the handrail and foremost step?

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 10,14, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Saito USP 5,040,659.

Saito discloses a similar guard device (comprising element 9, structure supporting element 9, and the element supporting the rail) comprising:

- a guide channel formed at its bottom to receive a part of the handrail positioned in the entry zone of the escalator (fig.1)
- an advertising display (9) provided on a front face thereof to face forward (C2/L34-64)
- wherein the guard device has a length corresponding to a distance between a front end of the handrail and a front edge of the foremost step of the escalator (fig.1)

5. Claims 10,11, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Lin USP 4,934,512.

Lin discloses a similar guard device (1) comprising:

- a guide channel formed at its bottom to receive a part of the handrail positioned in the entry zone of the escalator (C2/L31-37)
- a sterilization unit (2) provided therein (C2/L42-45)
- wherein the guard device has a length corresponding to a distance between a front end of the handrail and a front edge of the foremost step of the escalator (fig.1)

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin USP 4,934,512 (or Saito USP 5,040,659) in view of Rivera USP 5,117,968.

Lin (or Saito) discloses all the limitations of the claim (see ¶5), but does not expressly disclose an air-cleaning unit provided at a side wall thereof.

Rivera teaches an air-cleaning unit (22) provided at a side wall thereof for the purpose of cleaning the undersurface of an escalator while the escalator is in operation (C2/L5-28).

At the time of invention it would have been obvious to one having ordinary skill in the art to employ an air-cleaning unit provided at a side wall thereof, as taught by Rivera, in the device of Lin (or Saito), for the purpose of cleaning the undersurface of an escalator while the escalator is in operation.

8. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito USP 5,040,659 in view of Pietz USP 6,848,805.

Saito discloses all the limitations of the claim (see ¶4), but does not expressly disclose the advertising display including any one selected from a group consisting of

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an LED, an LCD, an organic EL sheet and a hologram and covered with a transparent sheet.

Pietz teaches the advertising display including any one selected from a group consisting of an LED, an LCD, an organic EL sheet and a hologram and protected with a transparent sheet (C2/L15-24, 32-43) for the purpose of protecting screen printed lighting elements that use little energy.

At the time of invention it would have been obvious to one having ordinary skill in the art to employ the advertising display including any one selected from a group consisting of an LED, an LCD, an organic EL sheet and a hologram and protected with a transparent sheet, as taught by Pietz, in the device of Saito, for the purpose of protecting screen printed lighting elements that use little energy.

9. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito USP 5,040,659 in view of Gorczyca USP 6,564,921.

Saito discloses all the limitations of the claim (see ¶4), but does not expressly disclose the sterilization unit including at least one ultraviolet lamp.

Gorczyca teaches at least one ultraviolet lamp (C5/L34-45) for the purpose of exposing the handrail to irradiation from the lights for disinfection.

At the time of invention it would have been obvious to one having ordinary skill in the art to employ at least one ultraviolet lamp, as taught by Gorczyca, in the device of Saito, for the purpose of exposing the handrail to irradiation from the lights for disinfection.

***Conclusion***

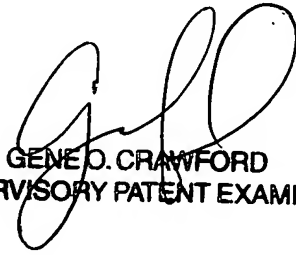
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie A. Nicholson III whose telephone number is 571-272-5487. The examiner can normally be reached on M-F, 8:30 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on 571-272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

L.N.  
4/10/2006

  
GENE O. CRAWFORD  
SUPERVISORY PATENT EXAMINER